SOUTH CAROLINA NUCLEAR ADVISORY COUNCIL

MINUTES
June 10, 2004
Room 209 Gressette Building
Columbia, South Carolina
(Approved September 2, 2004)

Members present: Chairman – Mr. Ben Rusche, Dr. Carolyn Hudson, Dr. Vince Van Brunt, Mr. Bill Mottel, Dr. David Peterson, and Mr. Steve Byrne

Staff present: Ms. Kate Billing, Ms. D'Juana Wilson

I. Welcome and Opening Comments

The Governor's Nuclear Advisory Council convened on Thursday, June 10, 2004, at 1:30 PM. Mr. Ben Rusche, Chairman of the Council, called the meeting to order and welcomed the speakers and guests. He then gave words of condolences in remembrance of President Ronald Reagan. A moment of silence was observed.

II. Approval of Minutes, March 4, 2004

Dr. Carolyn Hudson moved to approve the minutes from the March 4, 2004, meeting. Mr. Mottel seconded the motion and the Council agreed. Mr. Rusche then announced that there is a vacancy on the Council. He explained that Ms. Kate Billing has been promoted in the SC Energy Office, and will no longer be able to serve as a member of the Council. She will, however, be the liaison with the Council and the Energy Office staff.

III. Accelerated Clean up at SRS

Mr. Charlie Hansen, Assistant Manager for High Level Waste Disposition Project, US DOE, SRS Operation Office, addressed the Council. Mr. Hansen updated the Council on events that have occurred at the site and at the national level. He reported that

the Waste Management Disposition program has been formally presented to headquarters and to the public for comment. The proposal incorporates a number of agreements derived from discussion with the Council. Mr. Hansen began his presentation with the revised Performance Management Plan (PMP) and how it modifies the treatment of salt waste. Mr. Hansen made reference to the lawsuit in Idaho, and said that it is still causing a delay. He outlined the near term objectives of the PMP, mitigation actions and the waste tank closure schedule.

The U. S. Department of Energy (DOE) is revising the Savannah River Site (SRS) Environmental Management (EM) Performance Management Plan to attempt to mitigate delays in tank waste disposition.

A revised PMP was issued for public stakeholder and regulator comment on April 26, 2004. They expect to issue the final PMP revision following independent reviews this summer. Revised PMP commitments will be reflected in contract baseline changes in late summer. Once official changes have been made by headquarters, it will become an official document and they will move forward with it.

The original vitrification plan was discussed and the intention is to complete vitrification by 2019. If the plan does become law, DOE will be required to have the approval of SC DHEC to close tanks containing residual wastes. The bigger part of the problem is the salt waste treatment program. The salt waste is on top of the sludge, and it cannot be vitrified in the existing form, thus the need to separate, concentrate and alter the chemical form.

Mr. Hansen stated that the basis for the modified strategy is to maximize the quantity of radionuclides prepared for geologic disposal offsite, while retaining

accelerated risk reduction aspects of the original PMP. DOE directed Westinghouse Savannah River Company (WSRC) to implement the modified strategy in June, 2004. The revised PMP is being developed based on this modified strategy. Approval of the revised PMP to include the Baseline Change Proposal (BCP) by DOE headquarters will include DOE's commitment to implement the modified strategy. If enacted, legislation sponsored by Senator Lindsay Graham (R-SC) will allow for implementation of the modified strategy and resumption of tank closure activities subject to concurrence by SC DHEC.

Next, the SRS salt treatment and disposal timeline was reviewed, and the modified SRS waste disposition strategy was detailed. Mr. Hansen said that sludge processing would continue at an accelerated pace, and will finish in parallel with salt processing.

He reported that the strategy provides SRS the opportunity to meet the 2019 year-end State goals.

Mr. Hansen noted that the near term objectives are to maintain sludge feed to the Defense Waste Processing Facility (DWPF) for vitrification and eventual disposal in a geologic repository; and to prepare and feed salt waste to the SWPF at the maximum rate possible with startup projected in 2009.

The mitigation actions that will be taken will be to: 1) bring SWPF on line in early 2009; 2) bring a DWPF acid evaporator on line in 2009; 3) limit inputs to the tank farm system; and 4) remove limited amounts of salt waste as needed to prepare sludge batches and prepare for SWPF feed at full capacity.

Mr. Hansen said that the reference document for answers to questions regarding tank closure is: The DOE/EIS 0303-May 2002, which details the Basis for SRS Tank Closures. An electronic version has been provided to the Chairman. This document outlines tank closure plans and the impact of all DOE closure actions. DOE selected an alternative to waste removal in addition to the grout, to stabilize residual material and structure. A detailed investigation of tank residuals and the impact on human health and the environment is required on a tank by tank basis. Lastly, he said that approval by SC DHEC would be required for each tank closure to ensure cumulative closures are protective of human health and the environment.

Mr. Rusche raised questions regarding NRC's (Nuclear Regulatory Commission) input regarding closure plans. Mr. Hansen responded that NRC was consulted during the closure process through 1997. They spent a couple of years looking over the plans and issued letters stating that they concurred with the approach that was proposed and agreed that it was protective of human health and the environment. Mr. Rusche requested that the Council receive a copy of NRC's report.

Mr. Mottel asked about the budget beginning fiscal year October 1, 2004. Mr. Hansen said that he is optimistic that Senator Graham's amendment will prevail and they are proceeding as if the budget will pass. Mr. Mottel also asked for an update on the plans for Tank 16. Mr. Hansen said that it will be cleaned out. It will be a difficult task, but they will proceed on the best method. Dr. Van Brunt asked if there were any thoughts of going from the inside of the tank through the annulus. Mr. Hansen responded that there had not been any thoughts on going through the tank in that way.

In summary, Mr. Hansen stated that SRS is finalizing the revised EM PMP. It will serve as DOE's commitment for accelerated cleanup and risk reduction at SRS. He also said that salt waste treatment and disposal is critical to achieving high level waste (HLW) cleanup program objectives. SRS's modified salt strategy will provide the opportunity to continue DWPF production and achieve accelerated cleanup of tank waste. He also reported that SRS is reviewing its plans and schedules for tank closure with SC DHEC and EPA. Mr. Hansen's Power Point presentation is available on Council's web site.

Mr. Byrne asked a question regarding the Graham amendment. Mr. Hansen replied that the amendment states that the State of South Carolina will regulate the Department with regard to disposition of materials that might have been otherwise declared as HLW. He said that during the period that rulemaking is in progress, South Carolina can continue to make decisions as they have in the past for tank closures and for permitting waste water treatment operations in the HLW systems. It will give South Carolina the authority to do this without the challenge of a lawsuit. The agency considering rulemaking is DOE with the NRC providing direct input.

Mr. Rusche thanked Mr. Hansen for his presentation and then introduced Dr. Tom Burns, Defense Facilities Nuclear Safety Board Site Representative. Dr. Burns addressed the Council on the Defense Nuclear Facilities Safety Board (DNFSB) views of the HLW Plan and the Modified Plan. He began by stating that the DNFSB was created in the 1980's and reviewed the functions, powers, and oversight of the Board. He said that the Board's mission is to provide advice and recommendations to the Secretary of Energy to ensure adequate health and safety protection for the public and workers. The Board does

not provide licenses and does not issue fines. It is an advisory board. Of the $15 billion DOE budget, the DNFSB has a budget of $18 million; and of the 100,000 DOE employees, the Board has 100 employees. He stated that the five members of the Board must be nuclear safety experts. In the event of a direct threat, the Board has direct access to notify the President. Dr. Burns stated that the Board could hold public hearings with subpoenas. They provide technical reports and site weekly reports. Mr. Burns invited the Council to visit the website at "www.dnfsb.gov" to find out more about the Board. There was a brief discussion regarding the resident inspectors, and Dr. Burns reported that they rotate every 2-3 years. There is enabling legislation regarding the site residents. The Council agreed that they would like to continue to communicate with the Board and invited him to come again to update the Council. Dr. Burns' Power Point presentation is available on the Council's web site.

Dr. G. Todd Wright, Director, Program and Activities of the Savannah River National Laboratory (SRNL) addressed the Council. Dr. Wright gave the Council an overview of the recent designation of the SRNL. SRNL is a leader in the delivery of science-based solutions in 25 states and 27 countries/border crossings. The staff of 950 includes research and operations staff. They function in the areas of process development, real time solutions, plant support and problem solving for DOE and other government agencies. Research emphasis is in national security, energy security and environmental science and cleanup technologies. Dr. Wright announced that the SRNL joins the list of 12 National Laboratories and has been recognized as the safest DOE laboratory. SRNL has over 80 scientists and engineers conducting Hydrogen Research and is positioned to play a critical role in the next generation Energy Technology based

on Hydrogen. SRS has been handling tritium and hydrogen since 1955 and is the lead site for future tritium missions. The site is designed, built and currently operates the world's largest metal hydride based processing facility. The vision for the site is for South Carolina to be the hydrogen demonstration proving ground. Dr. Wright then discussed environmental stewardship and reported that environmental technologies have helped reduce Cleanup costs by over $500 million. In closing, Dr. Wright said the key elements to SRNL's strategy as a national laboratory are: to develop an enhanced capability to deliver technology solutions; to build core competencies to enhance their position as DOE's Premier Applied Science Laboratory; to expand SRNL contributions to new areas of National need; to enhance the stature of SRNL; and to accelerate development of Research Park capabilities. Mr. Rusche said he is pleased to see this evolution of the site and looks forward to having Dr. Wright come and address the Council in the future. Dr. Wright's Power Point presentation is available on the Council's web site.

Mr. Ernie Chaput addressed the Council in the public comment period. Mr. Chaput represents the Aiken County Economic Development Partnership and requested from the Council any support to the Partnership that can be provided.

Dr. Van Brunt raised the question as to the terms of adequacy of funding for the site in HLW and other EM missions. He was told that $350 million has been proposed for HLW and $188 million for SRS.

Mr. Byrne informed the Council that DHEC renewed the license at Barnwell for 5 years. The site can continue to receive waste. He further stated that there is no indication that Barnwell contains the lost fuel rod.

Mr. Rusche announced that the next meeting will be held in early September and the meeting was adjourned at 3:45 PM.

Note: The Council's web site is www.Barnwelldisposal.com where the presentation materials for the speakers can be found.